

**Amendments to the Specification:**

Please replace the sentence starting with "FIGURE 8" beginning on page 6, lines 4-5, with the following amended sentence:

FIGURE 8 illustrate a striped pattern (A) at 600 dpi and a striped pattern (B) at 400 dpi.

Please insert the following description in the "BRIEF DESCRIPTION OF THE DRAWINGS" beginning on page 7, lines 9-10.

FIGURE 21 is a block diagram illustrating that the first number 2 indicates the current line Y2 while the first number 1 is indicates a previous line Y1. The second number indicates a X position on the line.

Please replace the paragraph starting with "As shown in FIGURE 8" beginning on page 14, lines 5-13, with the following amended paragraph:

As shown in FIGURE 8, a striped pattern (A) at 600 dpi and a striped pattern (B) at 400 dpi have a different periodic cycle. It is difficult to suppress the edge enhancement using a single filter characteristic. Thus, it is necessary to detect the period of an image pattern and to use an appropriate filter coefficient. A sum of the width of a white block and a black block in the main scanning x direction is a striped pitch in a predetermined number of pixels and can be expressed in a striped period. As the intensity level decreases, the width of the white block widens and that of the black block narrows. Contrarily, as the intensity level increases, the width of the white block narrows and that of the black block widens.

Please replace the paragraph starting with "Referring back to FIGURE 4A" beginning on page 14, lines 15-23, with the following amended paragraph:

Referring back to FIGURE 4A, the filter unit 321 has a filter of a pixel matrix size of 7 in the main scanning direction x and 5 in the sub scanning direction y in the scanner 200. There are two groups A and B of weight coefficients a1-a7, b1-b7, c1-c7,

d1-d7 and e1-e7, each of which corresponds to a black in the filter 321. The coefficient group A suppress the enhancement of the striped pattern (A) at 600 dpi as shown in FIGURE 8 while it enhances the character edges. Similarly, the coefficient group B suppress the enhancement of the striped pattern (B) at 400 dpi as shown in FIGURE 8 while it enhances the character edges. The exemplary values of the coefficient groups A and B are provided below:

Please replace the sentence starting with "The above condition" beginning on page 16, lines 15-16, with the following amended sentence:

The above condition checks a low intensity or white area in the striped pattern (B) at 400 dpi as shown in FIGURE 8.

Please replace the paragraph starting with "The above condition" beginning on page 16, lines 24-28, with the following amended paragraph:

The above condition checks a high intensity or black area in the striped pattern (B) at 400 dpi as shown in FIGURE 8. Where  $D[i][j]$  indicates a pixel value of the image data at  $x=i$ ,  $y=j$  in the pixel matrix. For example,  $D[3][1]$  indicates a pixel value of a pixel that corresponds to coefficient  $a_3$  in the coefficient matrix. "&" is logical AND while "ABS" is an absolute value. The current pixel or the centrally located pixel is denoted by  $D[4][3]$ .

Please replace the paragraph starting with "When either of the two conditions" beginning on page 16, lines 30-32 and ending on page 17, lines 1-6 with the following amended paragraph:

When either of the two conditions is satisfied, since the image data that is read at 600 dpi is considered to be in the striped pattern (B) at 400 dpi, the edge enhancement is performed with the use of the coefficients in the coefficient group B. When neither of the two conditions is satisfied, the edge enhancement is performed with the use of the coefficients in the coefficient group A to avoid the enhancement of the striped pattern (A)

at 600 dpi. In other words, the pitch of an image is detected, and the enhancement of the particular pitch of an image pattern is avoided while the character edge is enhanced.

Although the above described edge enhancement uses the G image data, an alternative embodiment utilizes any image data that indicates the darkness/lightness level.

Please replace the paragraph starting with "Referring back to FIGURE 4A" beginning on page 37, lines 16-30, with the following amended paragraph:

Referring back to FIGURE 4A, a color detection unit 325 ultimately correctly determines the color of the input area. In general, the need for such correction arises from reading pixels in chromatic colors or achromatic color (black) in the input document, and a sampling rate and mechanical precision cause the relative and systematic discrepancy in the R, G and B data. As shown in FIGURE 15(aA), an ideal image intensity level signal representing black is uniform in the R, G and B intensity signal. However, as shown in FIGURE 15(bB), a practical image data signal is an ideal high-low wave form since an image is focused on a CCD device via a lens, the image intensity signal is generated by digitizing the CCD image signal. However, since an ordinary scanner utilizes a three-line CCD sensor, the R, G and B image data is not read simultaneously. Each of the R, G and B CCD sensor is physically separated and sequentially reads the same input document. Consequently, the read position discrepancy is resulted. For example, due to the read position discrepancy, the R, G and B intensity signal representing black as shown in FIGURE 15(bB) is relatively distorted in a range A as shown in FIGURE 15(eC). When the distortion is substantially large, the color discrepancy appears surrounding the black area.

Please replace the paragraphs starting with "FIGURE 20" beginning on page 50, lines 12-27, with the following amended paragraphs:

FIGURE 20 illustrates diagrams that enlarge the overlapping of the color material or colorants for color image duplication. FIGURE 20(dD) illustrates an ideal black character process for the four colorants. FIGURE 20(eE) illustrates a black character

process for the four colorants with a fading appearance since the correction does not take place for the black colorant while the correction takes place for other colorants. FIGURE 20(fF) illustrates a desirable output when a black character process is limited only to the black according to the current invention. Furthermore, FIGURE 20(gG) illustrates a desirable output when a black character process is limited only to the black and the correction is avoided for the black while the correction is applied to the non-black according to the current invention.

FIGURE 20(aA) illustrates a desirable output when a black character is processed at a uniform enlargement rate. FIGURE 20(bB) illustrates an output when a black character is processed at a uniform enlargement rate, but the printing position has been shifted. FIGURE 20(eC) illustrates an output when a black character is processed at a large enlargement rate, and the printing position has been shifted.

Please replace the paragraph starting with "The character inner space" beginning on page 51, lines 19-32 and ending on page 52, lines 1-3 with the following amended paragraph:

The character inner space candidate portions are examined in the following manner. Based upon the white block black character signal (A), the dark black area signal (B) and the black character (C), a character inner space candidate signal Q is expressed as follows:

$$Q_{24} = (A_{21} \& A_{22} \& A_{23} \& A_{24}) \# ((Q_{13} \# Q_{23} \# Q_{14} \# Q_{15}) \& (B_{24} \# C_{24}))$$

where a letter corresponds to one of the above described signals. Following the letter, the first number 2 indicates the current line Y2 while the first number 1 indicates a previous line Y1. The second number indicates a X position on the line. The above relation is shown in FIGURE 21. The above equation means that if the white block black character signal (A) is continuously active (A21 through A24 all active), the current pixel is assumed to be a character inner space candidate. Subsequently, the candidacy is

confirmed. That is, the pixel Q13, Q23, Q14 or Q15 that has been determined to have a character inner space candidate near the dark black area signal B24 or the black character C24, the current pixel is also confirmed as a character inner space candidate. In other words, a continuous group of the white block black character signals (A) triggers the confirmation of the character inner space candidates.